



UNITED STATES DEPARTMENT OF COMMERCE  
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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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100-453771-10

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PATENT DEPARTMENT  
BAYER CORPORATION  
100 BAYER ROAD  
PITTSBURGH, PA 15205-9741

100-453771-10

EXAMINER

ART UNIT PAPER NUMBER

7

1207

DATE MAILED: 08/28/97

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 5/12/97 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.  | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/>   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-4 are pending in the application.

Of the above, claims — are withdrawn from consideration.

2. ☐ Claims — have been cancelled.

3. ☐ Claims — are allowed.

4. ☒ Claims 1-4 are rejected.

5. ☐ Claims — are objected to.

6. ☐ Claims — are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on —. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on —, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed —, has been ☐ approved; ☐ disapproved (see explanation).

12. ☒ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☒ been received ☐ not been received ☐ been filed in parent application, serial no. —; filed on —.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

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15. Claims 3 and 4 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The examiner has not found support within the specification for the limitation of claim 3 pertaining to the hydrolyzable chlorine content. The disclosure within Example 1 and the comparative examples is not sufficient to provide support for the limitation. Furthermore, the statement within the comparative examples that the chlorine content was not below 0.1% cannot provide support for the content of the compositions of the instant invention.

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

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art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehmann et al. ('122) in view of Joulak et al. ('683) or Biskup et al. ('818) or Bischof et al. ('935).

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18. Lehmann et al disclose the production of ether isocyanates by reacting phosgene with ether amines. See column 1, lines 42+.

Lehmann et al. are silent regarding conducting the process in the vapor phase; however, the secondary references disclose the phosgenation of diamines in the vapor phase with an attendant increase in yield, as compared to conventional phosgenation processes. Therefore, one of ordinary skill in the art seeking a method of producing ether isocyanates and improving yield would have been motivated to utilize the vapor phase phosgenation methods of the secondary references with the ether amines of Lehmann et al., so as to obtain ether isocyanates displaying greater purity and more economical processes.

19. Firstly, applicants have argued that the instantly claimed process is patentably distinguishable from the prior art, because Lehmann et al. utilize specific diamines, and the instant claims are not limited. In response,

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the argument is without merit, because the instant claims encompass the diamines of Lehmann et al.

20. Secondly, applicants have argued that the secondary references fail to disclose ether isocyanates; therefore, one would not be motivated to combine the teachings of Lehmann et al. with the secondary references. In response, the secondary references teach that conducting the phosgenation reaction in the vapor phase is more efficient and produces higher yields with a variety of different amines as compared with traditional phosgenation (i.e. the reaction within Lehmann et al.); therefore, these teachings of the secondary references are considered to provide ample motivation to one of ordinary skill for conducting the phosgenation of ether amines, as well as other amines, in the vapor phase.

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sargent at telephone number (703) 308-2982.

RS/ayc  
August 25, 1997

*R. Sargent*  
RAISON SERGEANT  
PRIMARY EXAMINEE  
GROUP 1200